

# **(In)visible beauty**

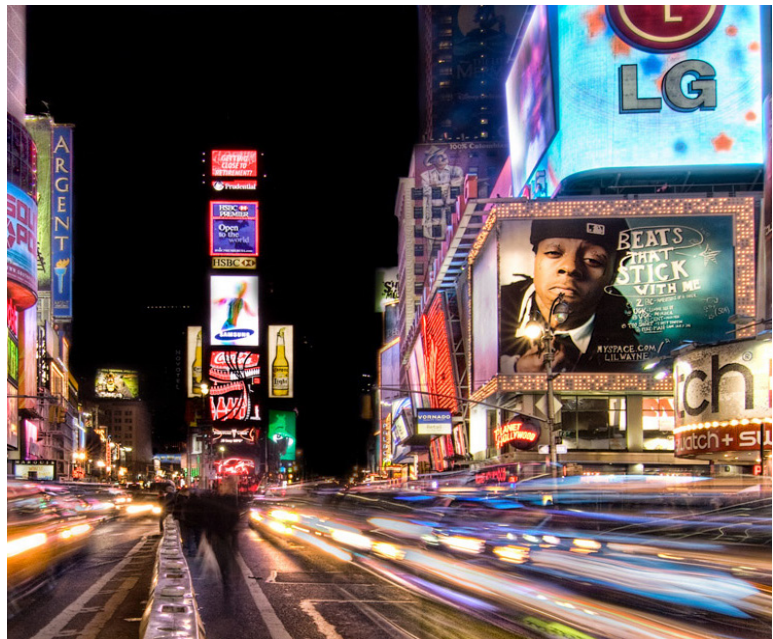
**MATIAS IMBERN, [mimbern@gsd.harvard.edu](mailto:mimbern@gsd.harvard.edu)**

**QI SU, [qsu@gsd.harvard.edu](mailto:qsu@gsd.harvard.edu)**

# (In)visible beauty

## DESIGN BRIEF

*“ The past is an illusion in which we store our memory, it cannot be changed. The future is an illusion that we self-project in our minds, it is unpredictable. The present is the only time in which we can figure out whether what we see or what we touch is an illusion or not, before everything turns into ‘The Past’ or ‘The Future’. “*



Time Square - New York

**(In)visible beauty** is as an installation that is anti-visual, against image consuming environment, it is to introduce the missing part of our daily life back to ourselves and it is designed as quiet, neutral, unaggressive and environmentally embedded entities. Its aim is to get people involved in the information discovering process which will encourage people to pay more attention to their surroundings events.

## CONCEPT

Nowadays, an image-consuming environment has given people many chances to obtain information very easily. Because of that, **the overwhelming information makes things that are important appear as insignificant, superficial and disregardable**. Contemporary societies tend to extend working time by reducing recreation time. These rushing times contributes to generate a negative impact on people's perception.

The project emerges as a response to this problem, without the intention of solving it but trying to express it; encouraging people to reflect about it...



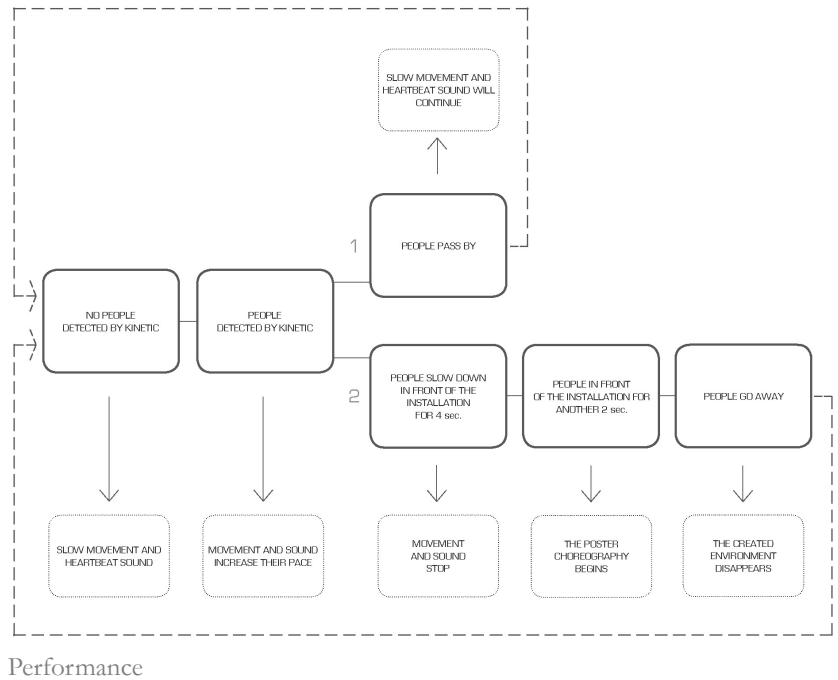
Grand Central Station: Rush-Hour - New York



Flower Withering / People Left Alone

## INFORMATION FLOW

The installation will generate heart beating sound periodically before people get into the detection area. If people are detected to be present in the area, the installation will speed up the sound for several seconds as a signal for people to understand its existence. Then the whole process is divided into two main diversions. One is when people is passing by without being aware of the poster wall (where everything is embedded), the installation will do nothing but keep quiet. The other one is when people are paying attention to the posters or just the sound and stopping for seconds, the choreography will began which means the pre-made posters will start moving in order.

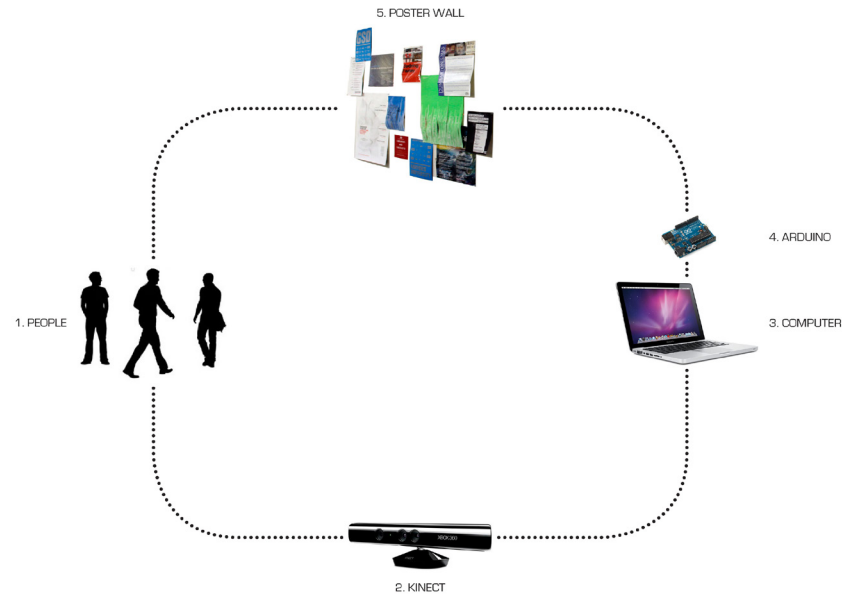




GSD Most Image Consuming Site: Second Floor Poster Wall

## INTERACTION SCENARIO

The Kinect is detecting people and then sending data back to the laptop which is connected to Arduino. By analyzing people's behavior in front of the installation, the laptop will send signals to activate/deactivate Arduino. The posters have **shape memory alloy** on the back side in order to create bending, squishing and/or folding actuators. They are all connected to Arduino and controlled by the laptop.



Interaction Sequence

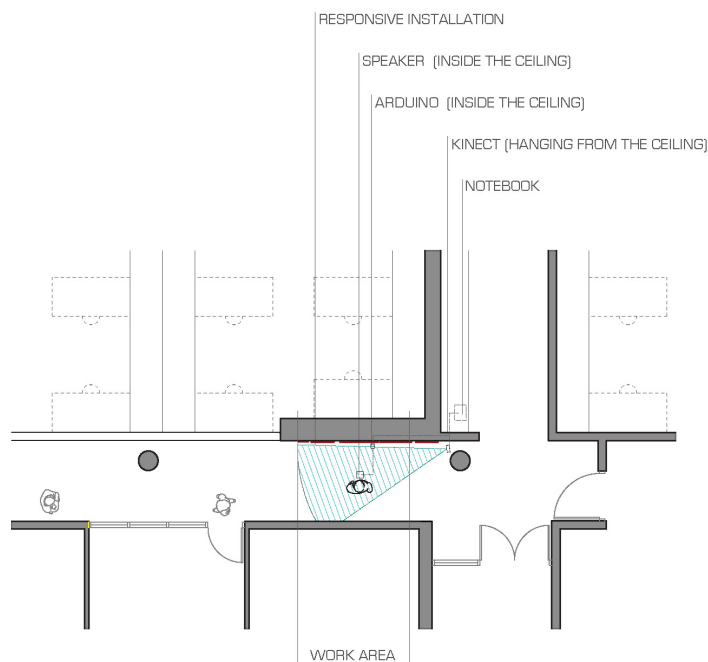


Poster Wall Installation

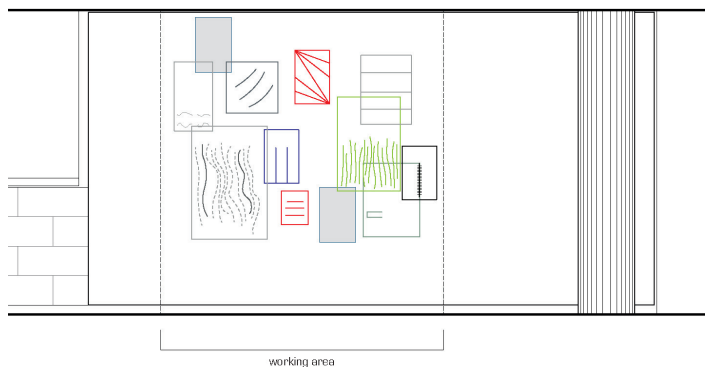
## PROTOTYPE IMPLEMENTATION

“(In)visible beauty” is installed on the poster wall running by the architecture department at the second floor of Gund Hall. The location is perfectly suitable for the project’s idea. GSD students are always running in a rush and rarely people pay attention to this wall, though the wall is designed to be there as a place to share information of the events of all the other schools all over the world.

The designed - fabricated posters are mounted on the wall based on the choreographic order and it is organized in an optimized way to reducing the amount of labor work for putting the conductible copper tapes for each poster. After these, the original posters taken from the wall are put back to set up an camouflage of posters. The Kinect camera is hang from the ceiling which gives it a nice angle to cover all the area where the posters are mounted. A speaker is on the ceiling to amplify the ambient heart beating sound.



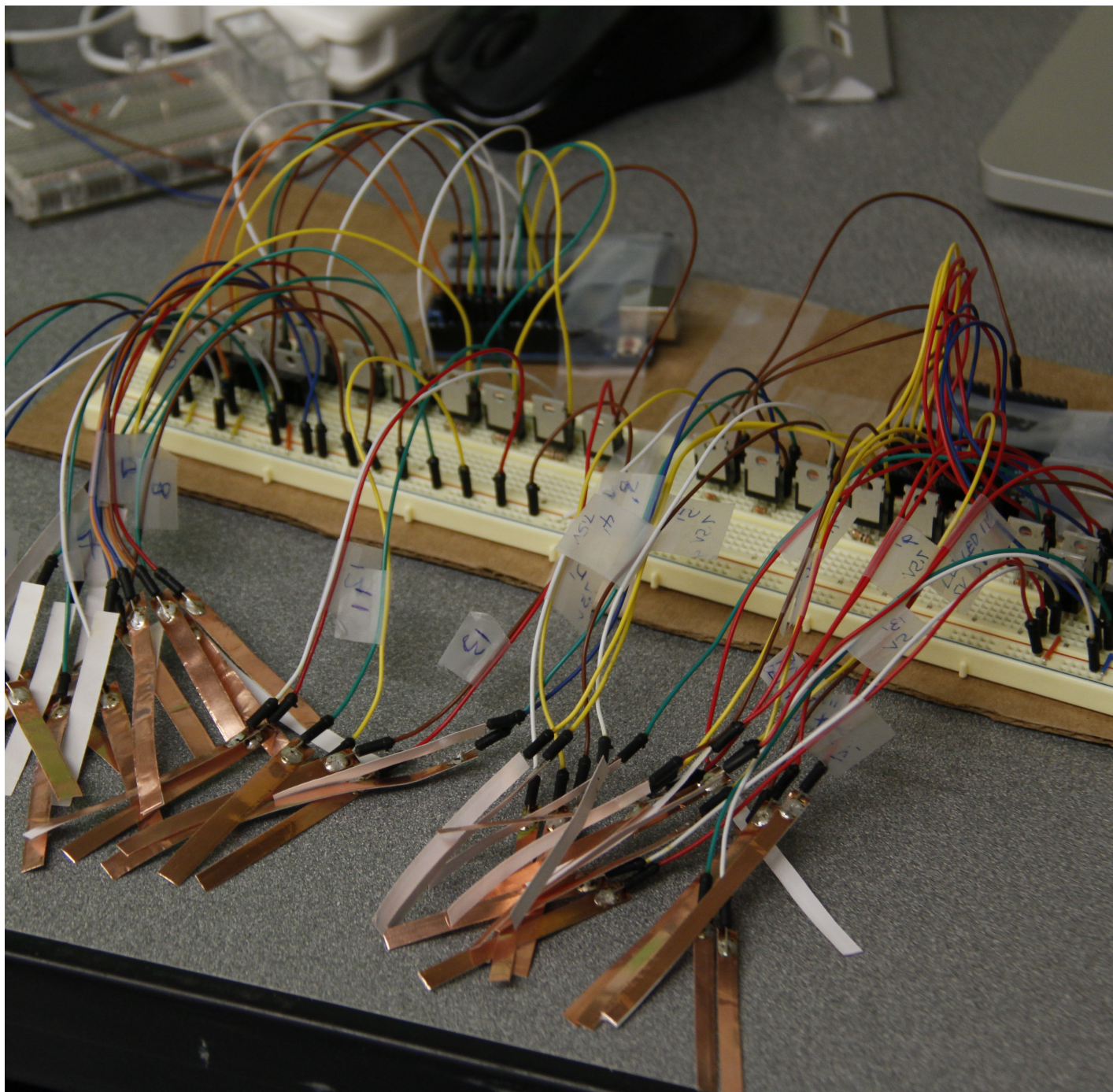
Installation Plan



Wall Elevation



Circuit Wall



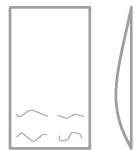
Arduino Breadboard Connections



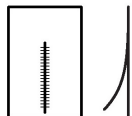
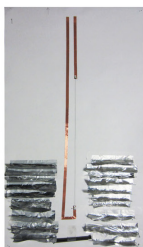
Poster Connections

# CHOREOGRAPHY CAST

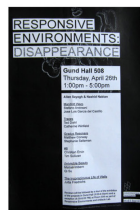
Each poster has its own identity. They are assigned names based on their capabilities of behavior. The final installation consists ten meters of shape memory alloys diameter in 0.006" and sixty yards of conductive copper tape. Every poster is customized based its existing graphic, movement are coordinated based on designer's intention. For the following development, the posters could be designed as portable devices which give their capability to be carried and mounted wherever designers want people to pay attention to.



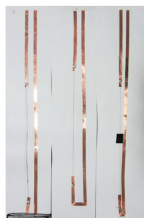
POSTER 1



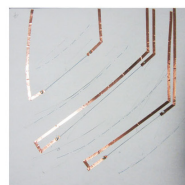
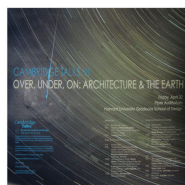
POSTER 2

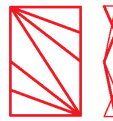
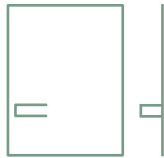


POSTER 3



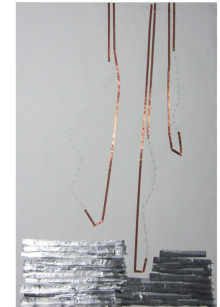
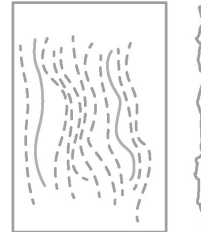
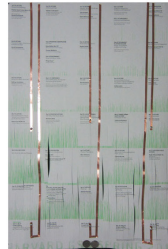
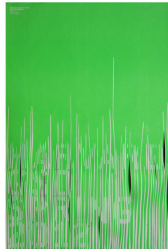
POSTER 4





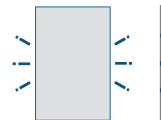
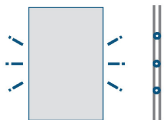
POSTER 5

POSTER 6



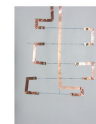
POSTER 7

POSTER 8



POSTER 9

POSTER 10



POSTER 11

POSTER 12

